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New Zealand

Dairy and Products

Annual

2006

Approved by:
Laura Scandurra
U.S. Embassy

Prepared by:
Alastair Patterson

Report Highlights:
New Zealand's milk production is forecast to reach a record 15.4 million tons during the 2006/07 season, a one percent increase from the previous season. Fonterra announced that it is splitting its payouts to farmers into milk price and value-added components. The EU has made changes to New Zealand's butter quota, eliminating Fonterra's monopoly on New Zealand butter imports into the EU. The food miles campaign in Europe is receiving a lot of attention in New Zealand because it could negatively impact on exports of New Zealand products.

Includes PSD Changes: Yes
Includes Trade Matrix: No
Annual Report
Wellington [NZ1]
[NZ]

SECTION I. EXECUTIVE SUMMARY

New Zealand's milk production is forecast to reach a record 15.4 million tons during the 2006/07 season (June to May), a one percent increase from the previous season. The increase is based on an expected one percent increase in cow numbers and similar growing conditions to last season. The increase in cow numbers is attributable to more land being converted to dairy production and increased carrying capacity on existing dairying land. While cow numbers continue to expand, the rate of growth has slowed over the last couple of years due to several factors including increasing land prices and increasing setup costs. This implies slower growth for New Zealand milk production in the future. Additional factors that will likely limit the future expansion of New Zealand's milk production include growing concerns over the environmental impact of dairy production, high land prices, the profitability of dairy farming, and water access issues.

New Zealand is one of the smallest dairy producing countries in the world but it is a major dairy trading country. Over 95% of New Zealand's dairy production is exported. This poses unique challenges for New Zealand and makes market access vital. With the dairy industry accounting for 20 percent of New Zealand's export earnings, New Zealand is a strong supporter of agricultural trade liberalization and is currently pursuing several free trade agreements.

The U.S. market is important for the New Zealand's dairy industry. It is New Zealand's largest export market by value and nearly twice as big as New Zealand's second largest market, China. New Zealand's major dairy exports to the United States by value are milk protein concentrates, including caseins and caseinates.

Fonterra, New Zealand's largest dairy cooperative accounting for 95% of dairy exports, continues to be an active player within the U.S. dairy market, forming strategic alliances and joint ventures with U.S. cooperatives over recent years. Fonterra has a marketing agreement with Dairy America, an association of seven U.S. producer-owned dairy cooperatives, to market and export U.S. nonfat dry milk. In addition, Fonterra has formed joint ventures with two of the Dairy America member cooperatives. Fonterra and Dairy Farmers of America, the largest farmer-owned cooperative in the United States, joined forces to create DairiConcepts, which produces milk protein concentrates at a plant in New Mexico. Fonterra also formed a joint venture with United Dairymen of Arizona to manufacture and sell milk protein concentrates in North America.

Fonterra's final payout to farmers for the 2005/06 season was NZ$ 4.10 per kilogram of milk solids (/kg ms), which is 11 percent lower than the 2004/05 payout of NZ$ 4.59. The payout for the 2006/07 season is expected to be slightly lower at NZ$ 4.05 per kilogram of milk solids. Fonterra has announced that, for the 2006/07 season, it will begin separating payouts to farmers into a milk price for the season and a value-added component. This is intended to help farmers understand how successful Fonterra has been in adding value to their milk. According to Fonterra, the milk price component for 2006/07 is forecast at NZ$ 3.60 and the value-add component at NZ$ 0.45.

Note: Data included in this report is not official USDA data. Official USDA data is available at http://www.fas.usda.gov/psd.

SECTION II. STATISTICAL TABLES

PS&D TABLES

New Zealand Dairy, Milk, Fluid									(1000 HEAD)(1000 MT)
	2005	Revised		2006	Estimate		2007	Forecast	
	USDA Official	Post Estimate	Post Estimate New	USDA Official	Post Estimate	Post Estimate New	USDA Official	Post Estimate	Post Estimate New
Market Year Begin		06/2004	06/2004		06/2005	06/2005		06/2006	06/2006
Cows In Milk	3970	3970	3970	4100	4100	4100	0	0	4140
Cows Milk Production	14500	14500	14500	14900	14900	15200	0	0	15400
Other Milk Production	0	0	0	0	0	0	0	0	0
Total Production	14500	14500	14500	14900	14900	15200	0	0	15400
Other Imports	0	0	0	0	0	0	0	0	0
Total Imports	0	0	0	0	0	0	0	0	0
Total Supply	14500	14500	14500	14900	14900	15200	0	0	15400
Other Exports	55	55	55	50	50	50	0	0	50
Total Exports	55	55	55	50	50	50	0	0	50
Fluid Use Dom. Consum.	360	360	360	360	360	360	0	0	360
Factory Use Consum.	14040	14040	14040	14445	14445	14745	0	0	14945
Feed Use Dom. Consum.	45	45	45	45	45	45	0	0	45
Total Dom. Consumption	14445	14445	14445	14850	14850	15150	0	0	15350
Total Distribution	14500	14500	14500	14900	14900	15200	0	0	15400
CY Imp. from U.S.	0	0	0	0	0	0	0	0	0
CY. Exp. to U.S.	0	0	0	0	0	0	0	0	0

Note: All PS&D tables are NOT OFFICIAL USDA DATA.

Source (all PS&D tables): Statistics New Zealand, Ministry of Agriculture and Forestry, Livestock Improvement Corporation, FAS/Wellington Estimates and Forecasts.

New Zealand Dairy, Cheese									(1000 MT)
	2005	Revised		2006	Estimate		2007	Forecast	
	USDA Official	Post Estimate	Post Estimate New	USDA Official	Post Estimate	Post Estimate New	USDA Official	Post Estimate	Post Estimate New
Market Year Begin		06/2004	06/2004		06/2005	06/2005		06/2006	06/2006
Beginning Stocks	26	35	26	26	35	26	26	35	26
Production	291	291	291	290	290	285	0	0	285
Other Imports	2	2	2	3	3	3	0	0	3
Total Imports	2	2	2	3	3	3	0	0	3
Total Supply	319	328	319	319	328	314	26	35	314
Other Exports	265	265	265	265	265	260	0	0	260
Total Exports	265	265	265	265	265	260	0	0	260
Human Dom. Consumption	28	28	28	28	28	28	0	0	28
Other Use, Losses	0	0	0	0	0	0	0	0	0
Total Dom. Consumption	28	28	28	28	28	28	0	0	28
Total Use	293	293	293	293	293	288	0	0	288
Ending Stocks	26	35	26	26	35	26	0	0	26
Total Distribution	319	328	319	319	328	314	0	0	314
CY Imp. from U.S.	0	0	0	0	0	0	0	0	0
CY. Exp. to U.S.	32	32	32	30	30	30	0	0	30

New Zealand Dairy, Butter									(1000 MT)
	2005	Revised		2006	Estimate		2007	Forecast	
	USDA Official	Post Estimate	Post Estimate New	USDA Official	Post Estimate	Post Estimate New	USDA Official	Post Estimate	Post Estimate New
Market Year Begin		06/2004	06/2004		06/2005	06/2005		06/2006	06/2006
Beginning Stocks	23	40	23	23	40	23	23	40	23
Production	341	321	341	395	340	390	0	0	395
Other Imports	1	1	1	1	1	1	0	0	1
Total Imports	1	1	1	1	1	1	0	0	1
Total Supply	365	362	365	419	381	414	23	40	419
Other Exports	316	296	316	370	315	365	0	0	370
Total Exports	316	296	316	370	315	365	0	0	370
Domestic Consumption	26	26	26	26	26	26	0	0	26
Total Use	342	322	342	396	341	391	0	0	396
Ending Stocks	23	40	23	23	40	23	0	0	23
Total Distribution	365	362	365	419	381	414	0	0	419
CY Imp. from U.S.	0	0	0	0	0	0	0	0	0
CY. Exp. to U.S.	28	28	28	30	30	30	0	0	30

Note: Butter figures include anhydrous milk fat. Anhydrous milk fat is multiplied by 1.22 to produce a butter weight equivalent.

New Zealand Dairy, Milk, Nonfat Dry									(1000 MT)
	2005	Revised		2006	Estimate		2007	Forecast	
	USDA Official	Post Estimate	Post Estimate New	USDA Official	Post Estimate	Post Estimate New	USDA Official	Post Estimate	Post Estimate New
Market Year Begin		06/2004	06/2004		06/2005	06/2005		06/2006	06/2006
Beginning Stocks	35	25	35	35	25	35	35	25	35
Production	225	225	225	249	234	247	0	0	249
Other Imports	1	1	1	1	1	1	0	0	1
Total Imports	1	1	1	1	1	1	0	0	1
Total Supply	261	251	261	285	260	283	35	25	285
Other Exports	221	221	221	245	230	243	0	0	245
Total Exports	221	221	221	245	230	243	0	0	245
Human Dom. Consumption	5	5	5	5	5	5	0	0	5
Other Use, Losses	0	0	0	0	0	0	0	0	0
Total Dom. Consumption	5	5	5	5	5	5	0	0	5
Total Use	226	226	226	250	235	248	0	0	250
Ending Stocks	35	25	35	35	25	35	0	0	35
Total Distribution	261	251	261	285	260	283	0	0	285
CY Imp. from U.S.	0	0	0	0	0	0	0	0	0
CY. Exp. to U.S.	1	1	1	1	1	1	0	0	1

New Zealand Dairy, Dry Whole Milk Powder									(1000 MT)
	2005	Revised		2006	Estimate		2007	Forecast	
	USDA Official	Post Estimate	Post Estimate New	USDA Official	Post Estimate	Post Estimate New	USDA Official	Post Estimate	Post Estimate New
Market Year Begin		06/2004	06/2004		06/2005	06/2005		06/2006	06/2006
Beginning Stocks	23	70	23	23	70	23	33	60	40
Production	585	585	585	640	585	651	0	0	664
Other Imports	1	1	1	1	1	1	0	0	1
Total Imports	1	1	1	1	1	1	0	0	1
Total Supply	609	656	609	664	656	675	33	60	705
Other Exports	585	585	585	630	595	634	0	0	644
Total Exports	585	585	585	630	595	634	0	0	644
Human Dom. Consumption	1	1	1	1	1	1	0	0	1
Other Use, Losses	0	0	0	0	0	0	0	0	0
Total Dom. Consumption	1	1	1	1	1	1	0	0	1
Total Use	586	586	586	631	596	635	0	0	645
Ending Stocks	23	70	23	33	60	40	0	0	60
Total Distribution	609	656	609	664	656	675	0	0	705
CY Imp. from U.S.	0	0	0	0	0	0	0	0	0
CY. Exp. to U.S.	4	4	4	4	4	4	0	0	4

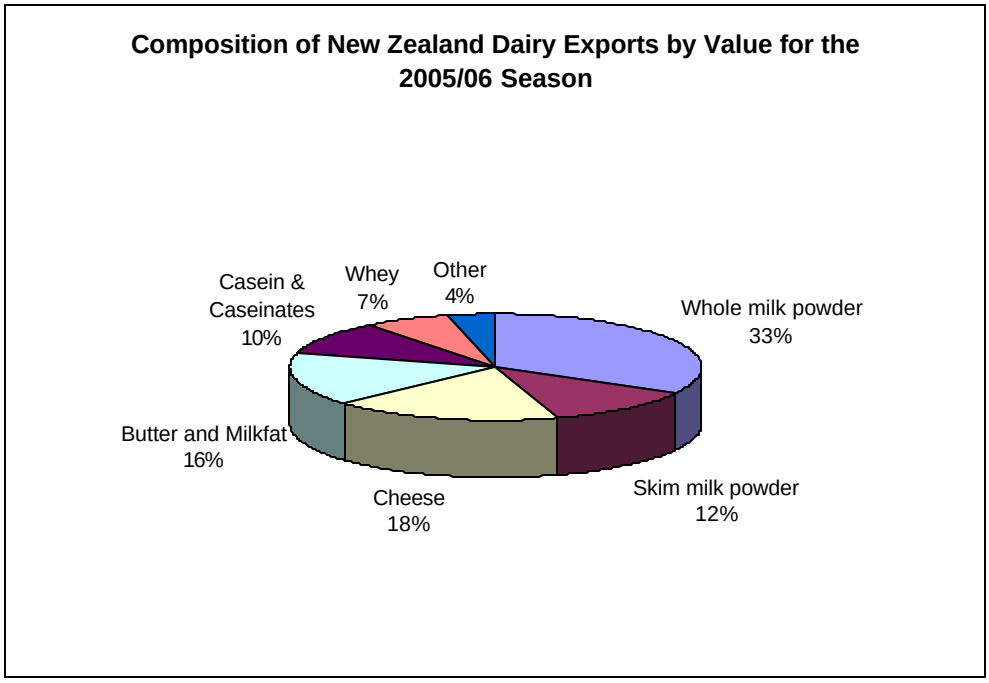

Figure 1. Source: Statistics New Zealand.

SECTION III. NARRATIVE ON SUPPLY, POLICY AND MARKETING

SUPPLY

Production and Cow Numbers

New Zealand's milk production during the 2006/07 season (June to May) is forecast at a record 15.4 million tons, a one percent increase from the previous season. The increase is based on a forecast one percent increase in cow numbers and similar growing conditions to those of the previous season. Weather for the 2005/06 season began with severe winter conditions. While some areas of the South Island had unusually heavy snowfall, other areas of New Zealand had heavy rain and flooding. This caused hardship on stock and heavy use of feed supplies. Despite the negative start, spring has generally produced positive pasture growth and stock are in good condition.

Total milk production for the 2005/06 season has been revised upward to 15,200 tons, a nearly 5 percent increase over the previous season. The increase is attributable to an expansion of cow numbers as production per cow was below the 2003/04 season[1]. At mid-season, milk flows were below expectations due to a cold and wet September and October, but good pasture growth stemming from improved weather in autumn resulted in record production.

Dairy cows in milk are forecast to increase one percent to 4.14 million for the 2006/07 season. Growth in cow numbers continues as more land is converted to dairying and farmers increase carrying capacity on existing dairying land. While the overall growth trend is upward, the rate of growth in cow numbers has slowed the last couple of seasons due to a number of factors, including increased land prices and increased setup costs. These factors are discussed in more depth below.

TRADE

Figure 2 shows New Zealand's growth in milk production, with 2005/06 a record season. The most significant growth is in whole milk powder production[2] reflecting Fonterra's heavy investment in powder production capacity in recent years. This is interesting, given Fonterra's stated focus on value added products (note that there is no information available on the composition of these whole milk powder exports or other products produced during processing). The spike in exports during the 2002/03 and 2003/04 seasons when Fonterra cleared excess inventory are also of interest. Note that data included in this report is not official USDA data. Official USDA data is available at http://www.fas.usda.gov/psd.

Cheese

New Zealand's cheese production for the 2006/07 season is forecast to remain at 285,000 tons. Exports are forecast to remain the same as the previous season at 260,000 tons. This follows a slightly lower revision of the 2005/06 figures.

Butter

New Zealand's butter production is forecast to increase one percent to 395,000 tons for the 2006/07 season. Exports are also forecast to increase one percent to 370,000 tons. This follows Post's revision of the 2005/06 figures. Note that butter figures include anhydrous milk fat.

[1] See Figure 2
[2] See Figure 1

Non-Fat Dry Milk
Not-fat dry milk powder (skim milk powder) production in New Zealand for the 2006/07 season is forecast to increase one percent to 249,000 tons. Exports are also forecast to increase one percent to 245,000 tons. This follows a revision by Post of the 2005/06 figures.

Full Fat Dry Milk
New Zealand's full fat dry milk (whole milk powder) production is forecast to increase two percent to 664,000 tons for the 2006/07 season. Exports are forecast to increase nearly two percent to 644,000 tons. This follows a revision of the 2005/06 figures by Post.

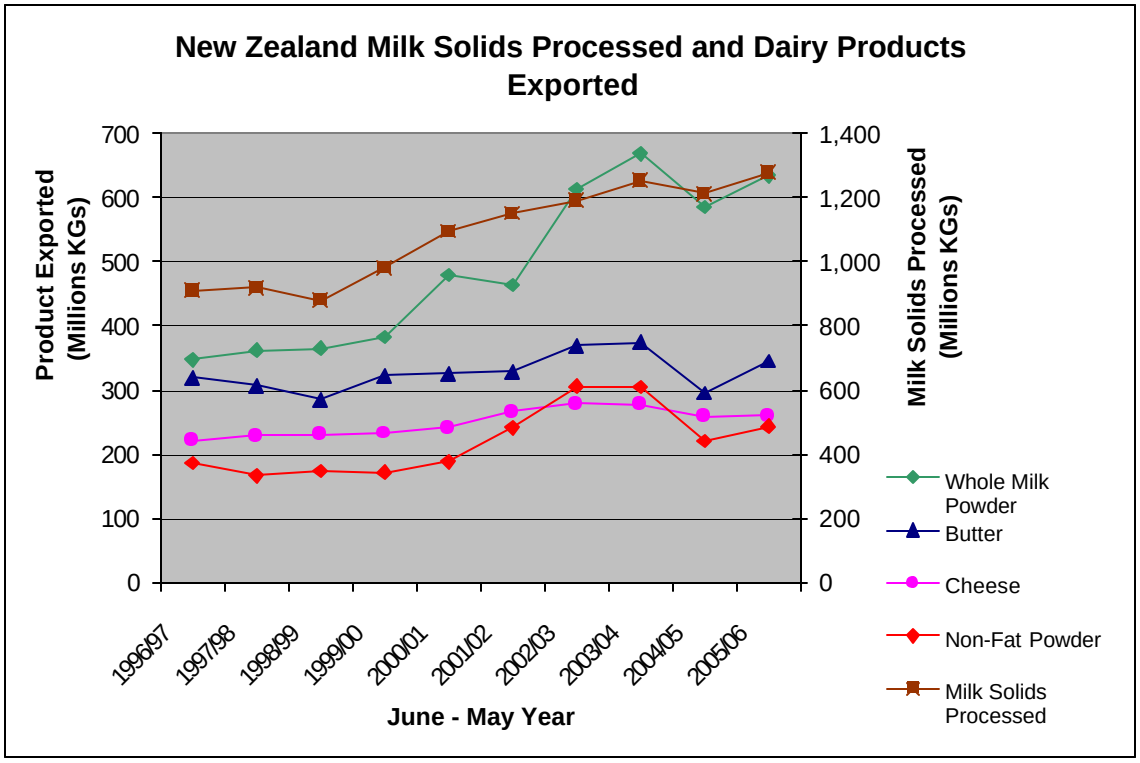

Figure 2. Source: Statistics New Zealand.

MARKETING

New Zealand Dairy Companies

The New Zealand dairy industry exports 95 percent of its production and accounts for 20 percent of New Zealand's export returns. Exporting companies focus strongly on the manufacture and export of dairy commodities, particularly milk powder, butter and cheese. There is also a strong focus on increasing the production of value added products, such as milk protein concentrates. While Fonterra processes 95 percent of New Zealand's milk production, the smaller exporting companies should not be ignored as their strategies involve the development of value-added products.

Fonterra Cooperative Group Ltd (Fonterra) is New Zealand's largest dairy organization, processing over 95 percent of New Zealand's milk production and accounting for 95 percent

of New Zealand's dairy exports. It has approximately 11,200 farmer shareholder suppliers. Through acquisitions and joint ventures Fonterra has moved from the world's ninth largest dairy organization, when it was formed in 2001, to the sixth largest today. Fonterra, through its New Zealand exports, as well as international acquisitions and joint ventures, controls approximately 40 percent of world trade in dairy products (depending on calculation methodology). It is a farmer-owned cooperative and New Zealand's largest organization, despite not being listed on the share market. Fonterra processed 1,210 million kilograms of milk solids from more than 14 billion liters of milk in the 2005/06 season. This was a 4.3 percent increase over the previous season and one percent higher than the previous production record set in 2003/04.

Westland Milk Products (Westland) is a much smaller cooperative than Fonterra, with 326 farmer suppliers. Westland is the only milk processor on the Westcoast of New Zealand's South Island and accounts for 2.8 percent of New Zealand milk production. West coast milk production has increased a total of 40 percent during the past four seasons, with annual growth averaging 8 percent. Westland expects its growth in milk supply to continue at approximately 8 percent per annum. The cooperative mainly produces milk powders, butter, and milk protein concentrates. As Westland is too small to compete directly against large companies such as Fonterra, it focuses on customizing products for individual customers and niche markets. Westland's payout to its farmers for the 2005/06 season was NZ$ 4.09/kg ms[3] (50 percent of farmers supplied colostrum, earning them an additional NZ$ 0.06/kg ms). It processed 42 million kgs of milk solids during the 2005/06 season.

Tatua Cooperative Dairy Company Ltd (Tatua) is a smaller cooperative than both Fonterra and Westland, with 138 farmer suppliers. As a small processor, Tatua has moved its focus from commodities to value-added products, particularly pharmaceuticals and functional foods. As such, Tatua's earnings increase when commodity prices are low and decrease when prices are high. This can be seen by contrasting Tatua's payout during the 2002/03 season (NZ$ 5.60/kg ms – low commodity prices) and the 2004/05 season (NZ$ 4.29/kg ms – high commodity prices), when Tatua's payout was for the first time lower than Fonterra's and Westland's, who focus more on commodities. Tatua is one of the world's largest producers of lactoferrin (used in sports drinks and infant formula) and produces other value-added products such as UHT milk, sterilized liquid food products and specialty food ingredients. Tatua's 2005/06 season payout to its farmers was NZ$ 4.35/kg ms and it processed 12 million kgs of milk solids.

Open Country Cheese (OCC) is a privately owned company that began production in late 2004 (see NZ5007 and NZ6007). It is planning to double production in the 2006/07 season from 80 million liters of milk to 160 million liters. It also plans to produce over 18,000 tons of cheese and 8,000 tons of whey powder. The number of farmers supplying OCC is increasing rapidly, from 26 in 2005/06 to over 100 for the 2006/07 season. OCC has also agreed to purchase a whole-milk powder plant from Denmark. The dates for installing this plant and its location are yet to be decided.

Synlait is a privately owned corporate dairy farming company. The company is continuing with plans to build a milk powder factory on the Canterbury plains in New Zealand's South Island in time for the 2008/09 season (see NZ5007 and NZ6007). The plant will have the capacity to process 200 million liters per year, supplying dairy ingredients internationally to food manufacturers. Synlait is planning to focus on the rapidly growing functional foods sector, with the ability to adapt herds and milk production to specific customer needs, as well as provide complete traceability from the farm to the customer. Synlait already owns and

[3] Payouts are calculated slightly differently between companies, but can still be used as a comparison

manages several large dairy farms in the area and plans to eventually have half of the milk sourced for its factory supplied by these farms.

Fonterra's Long-Term Strategy

Fonterra is aiming for global dairy industry leadership and has created several strategic themes[4] around this goal including being: the lowest cost supplier of commodity dairy products; the leading price and inventory manager in the global commodity market; an effective developer of dairy ingredients partnerships in selected markets; and the leading specialty milk components innovator and solutions providers. To achieve these goals, Fonterra is pursuing several strategies including driving trade liberalization, deepening relationships with existing partners and creating similar relationships with new customers in new markets, and creating new products and new technologies. Domestically, Fonterra is continuing its drive for increased production and productivity, which is essential to maintaining New Zealand's international competitiveness in the dairy industry. Internationally, Fonterra is building and strengthening relationships and joint ventures to source and market dairy products. However, Fonterra faces several challenges including accessing adequate capital to drive its ambitious growth plans and developing a larger value-added business to increase its revenues and reduce volatility. While there are several other factors that will affect Fonterra's future performance, these are the highest profile issues.

Increasing Domestic Production

New Zealand has experienced rapid growth in milk production in recent years due to the increase in cow numbers, the increase in production per cow[5], and the increase in production per hectare of land. New Zealand dairy cooperatives are expecting this trend to continue. Fonterra is aiming for a three percent annual growth rate in its New Zealand milk supply and other dairy companies are hoping for similar or larger increases.

The low-cost pastoral (grass-fed) system used by New Zealand dairy producers has, to date, provided good productivity growth. The growth is attributable to increased use of fertilizers, irrigation, and supplemental feeding (which includes domestically grown product, such as maize (corn) silage, as well as imported product, such as palm kernel from Malaysia). This has enabled farmers to profitably manage a larger number of cows on a given area. To continue this growth in production in the future there are several challenges that need to be overcome including mounting concerns over the environmental impact of dairy production, high land prices, the profitability of dairy farming, and water access. In addition, Fonterra faces losing some of its suppliers to domestic competitors as these cooperators will likely continue to grow rapidly in the future.

While New Zealand's pastoral system has a much lower environmental impact than other systems, the increasing number of dairy cows and their impact on the environment has been receiving increasing media attention. In fact, New Zealand is unique among developed nations in that agriculture accounts for approximately half the country's greenhouse gas emissions. This fact has not escaped the media, and New Zealand's dairy industry has recently received a large amount of negative press regarding pollution. The dairy industry is trying to be proactive in meeting the challenge of ensuring that it is environmentally responsible and sustainable. For example, the industry agreed in March 2006 to a sustainable environmental management strategy. This is based on the whole industry cooperating to develop, trial and communicate methods to minimize the environmental

[4] http://www.fonterra.com/content/aboutfonterra/strategy/default.jsp
[5] See Figure 3.

impact of dairy farming. This builds on the progress made with Fonterra's Clean Streams Accord, implemented in 2003, which has exceeded its main targets, but is lagging on others.

Fonterra has also attempted to improve the environmental impact of its manufacturing operations. In 2005, Fonterra achieved energy reductions of 1.8 petajoules, which is a considerable share of New Zealand's energy use. Fonterra has also invested in improving wastewater treatment from its plants, receiving an award in Waikato for the technology used at one of its plants. Approximately 75 percent of Fonterra's wastewater from manufacturing is applied to irrigated land. Despite this, some people are protesting the consent granted to Fonterra in early 2006 to discharge wash and cooling water into another North Island river from one of its other plants.

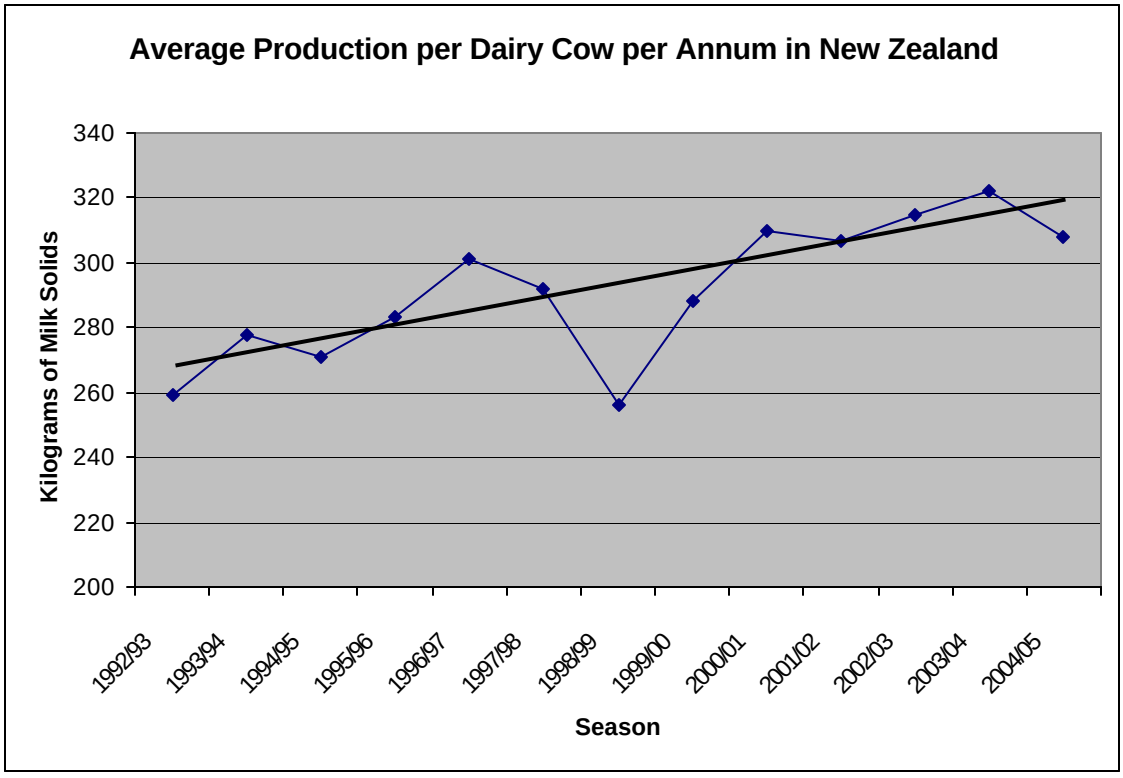

Figure 3. Source: Livestock Improvement Corporation

Another factor potentially impacting on the growth in Fonterra's milk supply is the profitability of farms. Major factors affecting profitability include the high costs of entry into the dairy industry, increased production costs, and dairy payouts that haven't always increased as expected by many in the industry. Expectations of high future payouts in the dairy industry have been a key driver in increasing entry and production costs. In recent years this has driven strong increases in land prices and motivated farmers to invest more heavily on farm to extract higher milk production out of existing land area. This has, in many cases, also increased production costs. For example, many farmers have increased the level of supplemental feeding to their cattle, increasing the marginal cost of each additional kilogram of milk solids produced, while many farmers have also greatly increased debt levels in recent years, increasing debt-servicing costs. As a result, many dairy farmers require a higher payout to maintain profitability. With Fonterra's forecast payment for the 2006/07 season at only NZ$ 4.05, many farmers are likely to reduce spending, which will limit production growth.

While forecast milk payouts have generally increased as the season progressed in previous years, Fonterra states that it is unlikely this year. According to Fonterra, the 2006/07 payout is based on an exchange rate of one New Zealand dollar averaging 61 U.S. cents. While the New Zealand dollar did drop to that level, it defied most analysts' predictions and strengthened to around 65 U.S. cents in mid-2006. The stronger New Zealand dollar means reduced revenues for producers because most of Fonterra's products are traded in U.S. dollars. As such, the recent strengthening of the New Zealand dollar could have a negative impact on farmers' payouts, although it is offset to some extent by Fonterra's hedging policy (spreading risk over a couple of seasons). These lower payouts may inhibit growth in milk supply for the next couple of seasons.

Farmers' return on their investment has declined markedly in recent years. Higher costs of entry for new farmers and the cost of expansion for existing farmers are prohibitive. Several factors account for this, particularly increased land prices, increased share prices in Fonterra (in most regions there are no alternative companies available to accept milk) and ongoing high prices for livestock, infrastructure, and feed, among others. The large amounts of capital required to fund these investments result in either a low return on assets or high costs associated with taking on a large amount of debt. This has been offset in recent years by the rapid growth in land values (and hence dairy farmers' assets), but prices have flattened recently, requiring farmers to have solid cash flows to benefit from their investments.

Rapid land price increases have been driven by a number of factors, including the large number of dairy conversions since the late 1990's. Strong returns in the dairy industry (and the perception that they will increase) have motivated many farmers to pay high prices to purchase land either in existing use as a dairy farm, or for conversion to a dairy farm, with the hopes of continued high payouts. These purchases and conversions have slowed markedly the last couple of seasons as the margins earned from converting farms to a dairy system decrease. Another factor is the increasing returns to sheep and beef farmers in recent years. Although dairying has been seen as providing better returns since 2000, the last couple of years have seen increased profitability for other farming industries, lamb in particular. These alternative industries have become increasingly desirable due to strong returns and increasingly prohibitive entry costs into dairying. Another competing land use is development, driven by a recent housing boom, which has resulted in large amounts of agricultural land converted in areas near cities and in desirable holiday locations.

Land suitable for dairy farming in New Zealand is becoming scarcer, which has also increased prices. In fact, much of New Zealand's agricultural land is unsuitable for dairying. A large amount of the land suitable for dairy in the North Island has already been converted to dairy. Some land is becoming available as forestry is harvested, but the cost of converting forestry to pasture is expensive and is often on land that is unsuitable for intensive dairy, making the conversion unprofitable. Other land uses have slowed the number of conversions considerably as land prices reach levels that make the return on investment of a dairy conversion unprofitable. There is more land available in the South Island, but there are problems there too. The area with the most potential is Canterbury but farmers need irrigation to make dairying profitable in that region. Disputes over water, however, have made the future of irrigation on the Canterbury plains uncertain, and greatly restricted the number of dairy conversions. Southland still has a large number of sheep farms, but the returns on these farms and high land prices give owners more factors to weigh up when considering dairy conversions. On the Westcoast of New Zealand's South Island, all milk production is supplied to Westland (described above). High rainfall and low land prices per kg ms produced (relative to other New Zealand regions) has the potential for ongoing increases in milk production. Westland is hoping to continually increase milk production by 8 percent per annum.

These factors have influenced many dairy farmers to look for investment opportunities offshore, with many investing in dairy farms in Australia, the United States and South America. These farmers feel that they can earn good premiums by introducing a New Zealand pastoral system to these countries, particularly in the U.S. where grain feeding dominates, and in South America. One New Zealand agricultural company, PGG Wrightson, is looking to list a company on the New Zealand share market that will invest in farms in Uruguay.

Overall, New Zealand will see continued growth of land area converted to dairy farms, but at a slower rate. The majority of production growth will come from increases in production per hectare and per cow. This growth will be restricted by the need to control the environmental impact of dairy farming, as well as payouts remaining high enough for farmers to justify increasing their expenditure per kg ms produced.

Fonterra's International Expansion

Despite Fonterra's strategy to continually increase its domestic supply of milk, the volume of milk sourced internationally by the cooperative continues to grow at a more rapid rate than domestically sourced milk. This is due to Fonterra needing a constant supply of product 12 months of the year (New Zealand milk production is seasonal), the slowing increase in New Zealand milk production, the perceived constraints on future production increases in New Zealand and Fonterra's goal to keep increasing the scale of its operations.

International expansion during the 2005/06 season included the consolidation and expansion of operations in Australia, a joint venture with United Dairymen of Arizona, a joint venture with Clover of South Africa, a 43 percent share of Chinese dairy company San Lu (listed as China's third largest dairy company), a joint venture with Dutch company Campina (given EU approval in mid-2006) and a joint venture with U.S. organization Dairy Management Inc (see NZ5021 and NZ6007 for more information on these acquisitions and joint ventures). Fonterra also sold poorly performing businesses in Russia and Egypt, replacing them with supply or distributorship agreements. In June 2006, Fonterra announced a partnership with GE Healthcare's Lunar business to develop products to treat osteoporosis. Fonterra also announced in September 2006 the sale of Naturalac Nutrition Limited (NNL) to Etika (NZ) Ltd. NNL trades under the Horleys brand, marketing branded sports nutrition and weight management products. NNL was sold as Fonterra stated it didn't fit with Fonterra's 'Winning through brands!' strategy. For a complete list of Fonterra's joint ventures, shareholdings and subsidiaries, refer to Fonterra's annual report[6].

During 2005/06, Fonterra sourced over 500,000 tons of commodity dairy products from countries other than New Zealand, including Australia, the U.S. and South America. In the United States, for example, Fonterra has a marketing agreement with Dairy America (an association of seven U.S. producer owned dairy cooperatives) to act as Dairy America's major exporter of nonfat dry milk. Fonterra has also formed joint ventures with Dairy Farmers of America (called DairiConcepts) and United Dairymen of Arizona. Fonterra's combination of joint ventures and alliances with companies all over the world has created many benefits for the cooperative. One benefit is Fonterra's ability to be a more dependable supplier to multinational companies as it can source product not only from New Zealand, but from all over the world. This also reduces Fonterra's cost of storing product to supply products year-round, despite its seasonal milk supply. Fonterra has also lessened its need for capital through the use of joint ventures in place of acquisitions. In many instances, Fonterra supplies technical expertise to a joint venture, while its partner supplies access to markets and/or capital.

[6] http://www.fonterra.com/content/shareholderfinancial/resultsreports/default.jsp

Fonterra's Capital Structure

Fonterra's capital structure has caused a large amount of debate in New Zealand's dairy industry. Many argue about how long Fonterra will be able to maintain its present cooperative structure. A number of industry observers argue that to maintain its ambitious growth targets, Fonterra will eventually need to source capital outside its farmer supplier/owners. Allowing outside investment is a difficult area of discussion, as farmers are unlikely to want 'outsiders' investing in their company, due to their desire to maintain control over it. So far, Fonterra has managed to fund its continued rapid expansion. Currently, cash flows, farmers purchasing shares, borrowings and capital notes fund Fonterra's operations. Fonterra's future borrowings may be limited, however, as it has reached borrowings of 52.5 percent when calculated as a debt to debt plus equity ratio (given Fonterra's figures of NZ$ 5.145 million of shareholders funds versus NZ$ 5.6 million for interest bearing debt). This is above its own stated comfortable range of 45 – 50 percent of debt to debt plus equity. Despite this, Fonterra states that it is comfortable having borrowings above this range. With Fonterra's main source of capital drawn from farmers having to purchase shares as they increase their milk supply, Fonterra's increasing share price and factors listed above will likely inhibit its access to capital.

Standard & Poor's downgraded Fonterra's credit rating in November, 2006, from AA- to A+. This followed Standard & Poor's placing Fonterra on CreditWatch in September as the company began its annual review of Fonterra's credit rating. Fonterra states that it was not surprised or concerned by the credit downgrade as it reflects its changing business profile, especially its growth of value added activities and international sourcing of product. Fonterra argues that its rating remains better than or equal to similar businesses. Fonterra also states that it is aiming to reduce its working capital, particularly in relation to debtors and inventory. In October 2006, Fitch Rating's affirmed Fonterra's AA- long-term rating and revised its rating outlook from stable to negative.

Value Added Products

Although industry observers often focus on Fonterra's value-added business, its main business is in commodities. International commodity prices and the New Zealand's exchange rate, which are out of Fonterra's control, determine 80 percent of Fonterra's payout to farmers. However, Fonterra is striving to expand the value-added components of its business, which would give Fonterra more control over the prices it receives and the volumes it sells. It would also reduce the fluctuations in payouts to its farmer suppliers.

Some industry observers have been critical of the limited amount that value-added product had contributed to Fonterra's payout to farmers, which has remained fairly constant at between 45 and 48 cents between the 2002/03 and 2005/06 seasons. The value-added contribution represents the returns earned by Fonterra above the commodity value of the products sold. According to Fonterra, the value-added revenues have been inhibited during the past four seasons due to strong commodity prices, which lower the margins Fonterra receives for value added products. This makes it difficult to assess the true value of Fonterra's long-term investments in value-added activities.

In its consumer goods business, Fonterra continues its 'Winning through brands!' strategy. The cooperative states that the key element of this strategy is an increased focus and investment in a smaller number of high performing brands, which potentially have strong global appeal. Fonterra continued its rapid expansion and consolidation of brands through acquisitions and joint ventures during 2005 and 2006. Domestically, Fonterra 'swapped' consumer brands in the New Zealand market with New Zealand Dairy Foods and purchased Kapiti Fine Foods. Fonterra views Australia as part of its domestic market and, as such,

continued to consolidate its position there, despite poor returns to date. Some estimates have Fonterra processing 18 percent of Australia's milk supply through subsidiary companies.

EU Changes to New Zealand's Butter Quota

In July 2006 the European Commission announced its decision to suspend all issuing of import licenses for New Zealand butter imported under quota into the EU. This was made following a ruling by the European Court of Justice, which declared the EU regulation for setting the rules for the importation of dairy products was invalid on technical grounds. The EU followed this with an announcement of an interim arrangement for shipments for the remainder of 2006. The EU has stated that at least six different companies be awarded tenders to import butter from New Zealand under the quota for the remainder of 2006, eliminating Fonterra's monopoly of the butter quota. Two Fonterra companies are able to bid, but no company can be awarded more than 30 percent of the quota. A permanent solution still needs to be negotiated between New Zealand and the EU. New Zealand has access for 77,400 tons of butter at lower tariffs into the EU.

According to Fonterra, average profits from quota rents have decreased substantially in recent years, from 14 cents/kg ms during the 2002/03 season to 4 cents/kg ms during the 2005/06 season. Fonterra reasons that this is the result of an increase in market prices relative to quota prices and an appreciation of the New Zealand dollar in recent years. Some analysts have made much higher estimates of Fonterra's quota rents. Quota rents are the difference between the world price at which a product is exported from New Zealand and the price at which it can be sold in the quota market.

Removal of Fonterra Control Over Quota Allocation

Fonterra currently administers the allocation of quota to applicable markets (see Table 1 below). Fonterra inherited these quota controls from the Dairy Board, when it merged with Kiwi Cooperative and New Zealand Dairy Group in 2001 to form Fonterra.

Removal of Fonterra Control over Export Licenses (Quota Management)		
Date	Country	Notes
June 30, 2007	Dominican Republic	
July 31, 2007	Canada	
Dec 31, 2007	European Communities	Removals between 12/31/02 and 12/31/10
Dec 31, 2008	United States	Cheddar and low-fat cheese
Dec 31, 2009	United States	American-type cheeses
Mar 31, 2010	Japan	

Table 1. Source: Dairy Industry Restructuring Act (2001)

No decisions have yet been made on how to administer these quotas once Fonterra's control is removed. Discussion and negotiation will need to take place between the New Zealand Government and the dairy industry. The format of these discussions is unknown, but the parties will need to begin discussions as soon as the first of these quotas is to be removed from Fonterra control by June 30, 2007.

Food Miles Campaign

According to the Government of New Zealand and New Zealand media, the concept of 'food miles' is gaining strength in Europe. A study by a New Zealand University (Lincoln University) has found the arguments made by food miles proponents to be misleading. The proponents of food miles argue that European consumers should not purchase food products from countries such as New Zealand because of the energy and carbon dioxide emissions associated with transporting foods over a large distance. These proponents state that consumers should instead purchase locally grown produce.

In contrast to this, Lincoln University found that the energy used in producing and transporting a New Zealand food product is, in most cases, less than that of its UK counterpart, by the time it reaches point of sale. In the case of dairy products, the study found that New Zealand dairy products were at least twice as energy efficient as those of the UK. The researchers claim that the food miles concept is too simplistic to assess environmental impact, as it does not take into account the total energy used in producing and transporting food products. Transportation energy usage when shipping from New Zealand to the UK was found to be less than 10 percent of the total energy used to produce a kilogram of milk solids in New Zealand.

The New Zealand Government has moved rapidly to refute some claims made by proponents of food miles, expressing concern that environmental barriers, such as food miles, may be used as non-tariff barriers against New Zealand imports in some countries in the future. Many analysts state that campaigns such as food miles further emphasize the need for New Zealand to be able to show that its farming practices are environmentally friendly and sustainable.

Farmer Payouts and Share Values

Fonterra's final payout to farmers for the 2005/06 season was NZ$ 4.10 per kg of milk solids. This is higher than Fonterra's original forecast of NZ$ 3.85 but 11 percent lower than the 2004/05 payout of NZ$ 4.59. In September, Fonterra reaffirmed its forecast payout for the 2006/07 season at NZ$ 4.05 per kilogram of milk solids (kg/MS). The payout structure has been a point of contention for many suppliers and industry observers as it has been difficult to assess the contribution of value-added activities to farmers' payouts. With the value of Fonterra's fair value share continually rising each year, farmers demand to know that they are getting a good return on their investment, with such a large proportion going into value-added activities.

Fonterra has announced that, for the 2006/07 season, it will begin separating payouts to farmers into a milk price for the season and a value added component. It has stated that for the 2006/07 season the milk price component is NZ$ 3.60, while the forecast value-added component is NZ$ 0.45. The cooperative states that the forecast milk price component of the payout will represent the estimated underlying value of milk supplied by the farmer during the year. Farmers can use this figure to determine the margins they are making on their milk after deducting farming costs. The value-added component is designed to inform farmers how successful Fonterra has been in increasing the value of their milk, mainly through Fonterra Brands and value-added activities under Fonterra Ingredients. The total payout will remain unchanged, but the two components will be paid separately. The milk price component will continue to be paid out on an advanced rate schedule, while the value-added component will be paid twice yearly. The definition of value-added is also being altered. Under the new system, the 2005/06 season's value-added share of the payout is

only NZ$ 0.25 instead of NZ$ 0.48. Fonterra forecasts a value-added payout of NZ$ 0.45 for the 2006/07 season.

In May 2006, Fonterra announced the fair value share (FVS) price for the 2006/07 season of NZ$ 5.80. According to Fonterra, this is an increase of 6 percent over the 2005/06 price, once share values are adjusted to take into account Fonterra's capital restructuring. Fonterra uses Duff and Phelps to independently determine the value of Fonterra's shares. Duff and Phelps increase in valuation is based on the anticipated benefits of cost saving measures, Fonterra's investments and joint ventures, and anticipated future increases in value-added earnings. As such, some industry analysts argue that the FVS price should not be used, as it is not indicative of the current value of Fonterra, but rather its forecast future value. Others argue that the FVS is the best system, as the value of the shares would reflect forecast future earnings if publicly traded, and reflect the value of the capital farmers have invested in the cooperative. These commentators argue that if a flat rate were used, farmers would not be rewarded for investing capital in the cooperative, while new farmer shareholders greatly benefit from earlier investments made by other farmers.

Following its splitting of the payout, Fonterra is assessing whether to allow sharemilkers to own shares. Currently only dairy farm owners can own shares in Fonterra. It is unknown, however, if sharemilker capital would replace that of farm owners or if it would be in addition to that of farm owners.

Free Trade Benefits to Fonterra

Benefits of Existing Free Trade Agreements

A free trade agreement (FTA) between New Zealand and Thailand entered into force on July 1, 2005. Following implementation, 52 percent of New Zealand's exports to Thailand became tariff-free. Prior to this only 4 percent were tariff free. Tariffs on New Zealand infant milk formula, casein and lactose were eliminated on implementation of the agreement, while tariffs on yogurt, buttermilk, milk protein concentrate and butterfat are scheduled for removal in 2009. For whole milk powder, tariffs will reduce from 18 to 15 percent on implementation of the agreement, phasing to zero by 2020. The FTA is expected to provide a significant boost for New Zealand's dairy exports. Thailand is currently New Zealand's 12th largest market for dairy products by value. As the FTA has only been in agreement for just over a year, it is difficult to assess its success. For the 2005/06 year (July to June), New Zealand exports to Thailand increased 10 percent to NZ$ 175 million. This is still below the previous three years, however, following a drop in exports during the 2004/05 year.

Potential Benefits of Future Free Trade Agreements

New Zealand, Australia and the Association of Southeast Asian Nations (ASEAN) continue negotiations on an FTA. The sixth round of discussions was held in July 2006. ASEAN is an important market for New Zealand, as approximately 20 percent of its dairy production by value is exported to member countries.

The sixth round of FTA negotiations were held between New Zealand and Malaysia in May 2006. Negotiations began in March 2005. Malaysia was New Zealand's ninth largest export market for dairy products during the 2005/06 season (June to May), with exports valued at NZ$ 208 million.

FTA negotiations between New Zealand and China continue. China was New Zealand's second largest export market for dairy products behind the United States during the 2005/06 season, with exports valued at NZ$ 390 million. New Zealand is China's largest supplier of dairy products, accounting for 30 percent of dairy imports in 2005, slightly ahead of the

United States. It is unknown how successful New Zealand will be at getting concessions for dairy products as China is concerned about the potential for a large influx of dairy products from New Zealand. The ninth round of negotiations was held in October 2006. New Zealand is the first developed country to begin FTA negotiations with China.

Negotiations on the Trans-Pacific Strategic Economic Partnership (Trans-Pacific SEP) concluded on June 3, 2005. This is based on New Zealand's FTA with Singapore, which entered into force in 2001. The FTA has been expanded to include Brunei and Chile. Brunei's part of the agreement entered into force in June 2006 and Chile is expected to enter soon. Tariffs on all dairy exports to Brunei are already zero, but a large number of tariffs placed on dairy products by Chile will be greatly reduced under the agreement. This will, however, have very little effect on New Zealand's dairy industry. New Zealand is already benefiting from the existing FTA with Singapore and both Chile and Brunei import only a modest amount of dairy product from New Zealand.

WTO Negotiations

Fonterra has publicly stated its disappointment with the progress of the WTO Doha round. The cooperative would benefit significantly from multilateral trade liberalization, with the expectation that it would open up high-value markets, increase prices in some markets and slightly lower world dairy production. To lessen the impact of current trade barriers, Fonterra has developed a complex international network of businesses and sources dairy product from all over the world.

FURTHER INFORMATION

Dairy Industry Restructuring Act 2001 (includes dates from removal of quota allocation – search under 'Statutes'):
http://www.legislation.govt.nz/

Fonterra Cooperative Group Ltd
www.fonterra.com

Westland Milk Products
www.westland.co.nz

Tatua Cooperative Dairy Company Ltd
www.tatua.com

Ministry of Agriculture and Forestry (includes reports and statistics)
www.maf.govt.nz

Livestock Improvement Corporation (see statistics under 'Publications')
http://www.lic.co.nz/main.cfm

Dexcel - New Zealand's dairy industry research organization
www.dexcel.co.nz

Dairy InSight – invests dairy farmer levies into research
http://www.dairyinsight.co.nz/